



PATENT
Attorney Docket No. **FORS-06679**

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Raymond F. Cracauer *et al.*

Serial No.: 10/054,023

Filed: 11/13/01

Entitled: Nucleic Acid Synthesizers

Group No.: 1743

Examiner: Handy

**INFORMATION DISCLOSURE
STATEMENT TRANSMITTAL**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

CERTIFICATE OF MAILING UNDER 37 C.F.R. § 1.8(a)(1)(i)(A)

I hereby certify that this correspondence (along with any referred to as being attached or enclosed) is, on the date shown below, being deposited with the U.S. Postal Service with sufficient postage as first class mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Dated: April 19, 2004

By:

Mary Ellen Waite

Sir or Madam:

Enclosed please find an Information Disclosure Statement and Form PTO-1449, including copies of the references contained thereon, for filing in the U.S. Patent and Trademark Office.

A check for \$180.00 is also enclosed pursuant to 37 C.F.R. § 1.17(p) for filing this Information Disclosure Statement after three months as set forth in 37 C.F.R. § 1.97(c).

The Commissioner is hereby authorized to charge any additional fee or credit overpayment to our Deposit Account No. **08-1290**. **An originally executed duplicate of this transmittal is enclosed for this purpose.**

Dated: April 19, 2004

Mary Ann D. Brown
Registration No. 42,363

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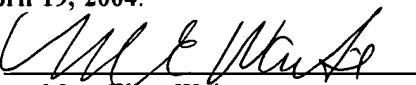
Entitled: **Nucleic Acid Synthesizers**

INFORMATION DISCLOSURE STATEMENT

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The citations listed below, copies attached, may be material to the examination of the above-identified application, and are therefore submitted in compliance with the duty of disclosure defined in 37 C.F.R. §§ 1.56 and 1.97. The Examiner is requested to make these citations of official record in this application.

The following printed publications are referred to in the body of the specification:

- U.S. Patent No. 5,472,672 to Bennan on 12/5/95
- U.S. Patent No. 5,368,823 to McGraw *et al.* on 11/29/94
- U.S. Patent No. 5,935,527 to Andrus *et al.* on 8/10/99
- U.S. Patent No. 5,865,224 to Ally *et al.* on 2/2/99
- WO99/65602

Applicants have become aware of the following printed publications which may be material to the examination of this application:

- U.S. Patent No. 6,280,950 ;

- U.S. Patent No. 6,270,730 ;
- U.S. Patent No. 6,264,891 ;
- U.S. Patent No. 6,126,904 ;
- U.S. Patent No. 6,171,555;
- U.S. Patent No. 6,150,102;
- U.S. Patent No. 6,096,276;
- U.S. Patent No. 6,045,755;
- U.S. Patent No. 5,792,430;
- U.S. Patent No. 5,770,157;
- U.S. Patent No. 5,580,523;
- U.S. Patent No. 5,443,791;
- U.S. Patent Publication No. 2001/0022950;
- U.S. Patent Publication No. 2001/0007644;
- U.S. Patent Publication No. 2001/0001035; and
- U.S. Patent Publication No. 2001/0000723.
- U.S. Patent No. 3,917,455;
- U.S. Patent No. 4,353,989;
- U.S. Patent No. 4,483,964;
- U.S. Patent No. 4,517,338;
- U.S. Patent No. 4,598,045;
- U.S. Patent No. 4,598,049;
- U.S. Patent No. 4,744,037;
- U.S. Patent No. 4,837,159;
- U.S. Patent No. 5,053,454;
- U.S. Patent No. 5,112,575;
- U.S. Patent No. 5,262,530;
- U.S. Patent No. 5,298,259;
- U.S. Patent No. 5,437,979;
- U.S. Patent No. 5,462,748;
- U.S. Patent No. 5,466,608;
- U.S. Patent No. 5,503,805;

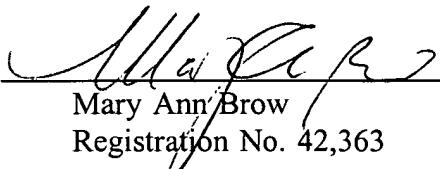
- U.S. Patent No. 5,762,881;
- U.S. Patent No. 5,789,162;
- U.S. Patent No. 5,874,554;
- U.S. Patent No. 5,885,837;
- U.S. Patent No. 5,981,733;
- U.S. Patent No. 6,057,424;
- U.S. Patent No. 6,165,717;
- U.S. Patent No. 6,175,006;
- U.S. Patent No. 6,177,554;
- U.S. Patent No. 6,225,061;
- U.S. Patent No. 6,329,210;
- U.S. Patent No. 4,401,796;
- U.S. Patent No. 4,689,405;
- U.S. Patent No. 4,734,363;
- U.S. Patent No. 4,950,745;
- U.S. Patent No. 5,047,524;
- U.S. Patent No. 5,112,962;
- U.S. Patent No. 5,132,418;
- U.S. Patent No. 5,149,798;
- U.S. Patent No. 5,264,562;
- U.S. Patent No. 5,264,566;
- U.S. Patent No. 5,324,831;
- U.S. Patent No. 5,514,789;
- U.S. Patent No. 5,518,651;
- U.S. Patent No. 5,548,076;
- U.S. Patent No. 5,616,700;
- U.S. Patent No. 5,620,852;
- U.S. Patent No. 5,639,873;
- U.S. Patent No. 5,646,267;
- U.S. Patent No. 5,652,358;
- U.S. Patent No. 5,668,266;

- U.S. Patent No. 5,668,268;
- U.S. Patent No. 5,700,919;
- U.S. Patent No. 5,703,218;
- U.S. Patent No. 5,703,223;
- U.S. Patent No. 5,723,599;
- U.S. Patent No. 5,726,300;
- U.S. Patent No. 5,736,626;
- U.S. Patent No. 5,789,162;
- U.S. Patent No. 5,821,058;
- U.S. Patent No. 5,840,841;
- U.S. Patent No. 6,313,284;
- U.S. Patent No. 5,541,314
- U.S. Patent No. 5,053,454
- WO91/13084
- WO98/10857
- WO98/36829
- WO98/39099
- WO98/57181
- User's Manual ABI 3900 High Throughput DNA Synthesizer, Applied Biosystems (2001)

PATENT
Attorney Docket No. **FORS-06679**

This Information Disclosure Statement under 37 C.F.R. §§ 1.56 and 1.97 is not to be construed as a representation that a search has been made, that additional information material to the examination of this application does not exist, or that any one or more of these citations constitutes prior art.

Dated: April 19, 2004

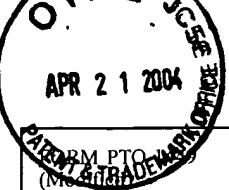

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Sheet 1 of 3

 INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use Several Sheets If Necessary) (37 CFR § 1.98(b))				U.S. Department of Commerce Patent and Trademark Office	Attorney Docket No.: FORS-06679	Serial No.: 10/054,023	
				Applicant: Raymond F. Cracauer <i>et al.</i>			
				Filing Date: 11/13/01		Group Art Unit: 1743	
U.S. PATENT DOCUMENTS							
Examiner Initials	Cite No.	Serial / Patent Number	Issue Date	Applicant / Patentee	Class	Subclass	Filing Date
	1	5,472,672	12/5/95	Bennan	422	131	10/22/93
	2	5,368,823	11/29/94	McGraw <i>et al.</i>	422	1340	2/11/93
	3	5,935,527	8/10/99	Andrus <i>et al.</i>	422	131	4/29/93
	4	5,865,224	2/2/99	Ally <i>et al.</i>	141	130	12/20/96
	5	6,280,950	8/28/01	Lipshutz <i>et al.</i>	435	6	10/28/99
	6	6,270,730	8/7/01	McLuen <i>et al.</i>	422	131	6/16/98
	7	6,264,891	7/24/01	Heyneker <i>et al.</i>	422	64	5/18/99
	8	6,126,904	10/3/00	Zuellig <i>et al.</i>	422	130	9/5/97
	9	6,171,555	1/9/01	Cargill <i>et al.</i>	422	104	3/6/98
	10	6,150,102	11/21/00	Mills, Jr. <i>et al.</i>	435	6	5/15/98
	11	6,096,276	8/1/00	Laursen	422	103	8/14/91
	12	6,045,755	4/4/00	Lebl <i>et al.</i>	422	65	3/10/97
	13	5,792,430	8/11/98	Hamper	422	131	8/11/98
	14	5,770,157	6/23/98	Cargill <i>et al.</i>	422	99	9/18/96
	15	5,580,523	12/3/96	Bard	422	50	4/1/94
	16	5,443,791	8/22/95	Cathcart <i>et al.</i>	422	65	8/7/92
	17	6,329,210	12/11/01	Schleifer	436	518	10/29/99
	18	6,175,006	1/16/01	Andrus <i>et al.</i>	536	25.4	3/30/99
	19	6,057,424	5/2/00	Vail, III	530	333	3/24/97
	20	5,981,733	11/9/99	Gamble <i>et al.</i>	536	25.3	9/16/96
	21	5,885,837	3/23/99	Winkler <i>et al.</i>	435	91.1	10/23/96
	22	5,840,841	11/24/98	Zuckermann <i>et al.</i>	530	338	5/8/97
	23	5,541,314	7/30/96	McGraw <i>et al.</i>	536	25.31	8/2/94
	24	5,466,608	11/14/95	Lapluye <i>et al.</i>	436	86	9/7/93
	25	5,462,748	10/31/95	Lloyd <i>et al.</i>	424	484	1/14/94
	26	5,298,259	3/29/94	Lloyd <i>et al.</i>	424	486	11/5/91
	27	5,262,530	11/16/93	Andrus <i>et al.</i>	536	25.31	7/27/90
	28	5,153,319	10/6/92	Caruthers <i>et al.</i>	536	27	3/31/86
	29	5,143,418	7/21/92	Caruthers <i>et al.</i>	536	27	6/18/94
	30	5,112,575	5/12/91	Whitehouse <i>et al.</i>	422	116	2/14/91
	31	5,047,524	9/10/91	Andrus <i>et al.</i>	536	27	12/21/88
	32	4,744,037	5/10/88	Niina <i>et al.</i>	364	497	7/15/85
	33	4,598,049	7/1/86	Zelinka <i>et al.</i>	435	287	8/31/83
Examiner:				Date Considered:			
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							

FORM PTO-1449 (Modified)		U.S. Department of Commerce Patent and Trademark Office INFORMATION DISCLOSURE STATEMENT BY APPLICANT <small>(Use Several Sheets If Necessary)</small> (37 CFR § 1.98(b))		Attorney Docket No.: FORS-06679	Serial No.: 10/054,023
APR 21 2004				Applicant: Raymond F. Cracauer	
				Filing Date: 11/13/011	Group Art Unit: 1743

U.S. PATENT DOCUMENTS

Examiner Initials	Cite No.	Serial / Patent Number	Issue Date	Applicant / Patentee	Class	Subclass	Filing Date
	34	4,517,338	5/14/85	Urdea <i>et al.</i>	525	54.11	7/13/84
	35	4,483,964	11/20/84	Urdea <i>et al.</i>	525	54.11	6/20/83
	36	4,458,066	7/3/84	Caruthers <i>et al.</i>	536	27	3/24/81
	37	4,353,989	10/12/82	Bender <i>et al.</i>	435	287	1/19/81
	38	6,177,554	1/23/01	Woo <i>et al.</i>	536	23.1	6/5/95
	39	5,736,626	4/7/98	Mullah <i>et al.</i>	536	25.3	1/29/96
	40	5,723,599	3/3/98	Klem <i>et al.</i>	536	25.3	3/22/95
	41	5,703,218	12/30/97	Urdea <i>et al.</i>	536	23.1	4/13/95
	42	5,668,268	9/16/97	Tang <i>et al.</i>	536	25.3	11/27/95
	43	5,652,358	7/29/97	Pfleiderer <i>et al.</i>	536	25.3	11/3/94
	44	5,639,873	6/17/97	Barascut <i>et al.</i>	536	25.3	8/4/94
	45	5,518,651	5/21/96	Reddy <i>et al.</i>	252	193	6/8/94
	46	5,264,562	11/23/93	Matteucci	536	23.1	4/24/91
	47	4,950,745	8/21/90	Ishido <i>et al.</i>	536	58	6/27/88
	48	6,313,284 B1	11/6/01	Kwiatkowski <i>et al.</i>	536	25.3	3/30/00
	49	6,225,061 B1	5/1/01	Becker <i>et al.</i>	435	6	3/10/99
	50	6,165,717	12/26/00	Dower <i>et al.</i>	435	6	5/13/98
	51	5,874,554	2/23/99	Gamble <i>et al.</i>	536	22.1	12/13/96
	52	5,789,162	8/4/98	Dower <i>et al.</i>	435	6	6/7/95
	53	5,726,300	3/10/98	Klem <i>et al.</i>	536	25.34	6/15/94
	54	5,703,223	12/30/97	Wickstrom <i>et al.</i>	536	25.33	9/2/94
	55	5,700,919	12/23/97	Seliger <i>et al.</i>	536	22.1	1/10/95
	56	5,668,266	9/16/97	Ruth	536	25.3	5/12/95
	57	5,646,267	7/8/97	Stec <i>et al.</i>	536	25.33	6/5/95
	58	5,620,852	4/15/97	Lin <i>et al.</i>	435	6	10/31/94
	59	5,616,700	4/1/97	Reddy <i>et al.</i>	536	25.3	11/18/93
	60	5,548,076	8/20/96	Froehler <i>et al.</i>	536	25.34	8/13/93
	61	5,514,789	5/7/96	Kempe	536	25.4	4/21/94
	62	5,324,831	6/28/94	Marquez <i>et al.</i>	536	25.3	4/6/88
	63	5,264,566	11/23/93	Froehler <i>et al.</i>	536	25.34	4/26/90
	64	5,149,798;	9/22/92	Agrawal <i>et al.</i>	536	27	4/6/89
	65	5,112,962	5/12/91	Letsinger <i>et al.</i>	536	27	11/9/90

Examiner:

Date Considered:

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	66	4,734,363	3/29/88	Dattagupta <i>et al.</i>	435	91	11/27/984
	67	4,689,405	8/25/98	Frank <i>et al.</i>	536	27	1/4/84
	68	4,401,796	8/30/83	Itakura	535	340	4/30/81
	69	3,917,455	11/4/75	Bak <i>et al.</i>	23	253	5/10/74
	70	4,837,159	6/6/89	Yamada	436	45	9/17/85
	71	5,503,805	4/2/96	Sugarman <i>et al.</i>	422	131	11/2/93
	72	5,437,979	8/1/95	Rampal <i>et al.</i>	435	6	8/24/92
	73	5,762,881	6/9/98	Harness <i>et al.</i>	422	132	10/29/96
	74	4,598,045	7/1/86	Masover <i>et al.</i>	435	34	2/19/85
	75	5,053,454	10/1/91	Judd	525	54.11	2/15/89
U.S. PATENT APPLICATION PUBLICATION							
Examiner Initials	Cite No.	Publication Number	Publication Date	Applicant / Patentee	Class	Subclass	Filing Date
	76	2001/0022950	9/20/01	Hall <i>et al.</i>	422	131	5/18/01
	77	2001/0007644	7/12/01	McLuen <i>et al.</i>	422	131	12/19/00
	78	2001/0001035	5/10/01	McLuen <i>et al.</i>	422	100	12/19/00
	79	2001/0000723	5/3/01	McLuen <i>et al.</i>	422	100	12/19/00
FOREIGN PATENTS OR PUBLISHED FOREIGN PATENT APPLICATIONS							
		Document Number	Publication Date	Country / Patent Office	Class	Subclass	Translation
							Yes
	80	WO99/65602	23 Dec. 99				
	81	WO 00/56445	28 Sept. 00				
	82	WO 91/13084	5 Sept. 91				
	83	WO 98/36829	27 Aug. 98				
	84	WO 98/39099	11 Sept. 98				
	85	WO 98/57181	17 Dec. 98				
	86	WO 98/10857	19 Mar. 98				
OTHER DOCUMENTS (Including Author, Title, Date, Relevant Pages, Place of Publication)							
	87	User's Manual ABI 3900 High Throughput DNA Synthesizer, Applied Biosystems (2001)					
Examiner:				Date Considered:			
EXAMINER: Initial citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.							